

OFFICIAL REPORT

— OF THE —

OWYHEE, RECONNOISSANCE,

MADE BY

Lieut. Colonel C. S. Brew, 1st Oregon Cavalry,

IN THE SUMMER OF 1864.

PERSUANT TO THE ORDERS OF

BRIGADIER GENERAL GEORGE WRIGHT,

COMMANDING DEPARTMENT OF THE PACIFIC.

JACKSONVILLE, OREGON.

OREGON SENTINEL PRINTING OFFICE.

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Official Report of the Owyhee Expedition.

COLONEL DREW'S REPORT.

JACKSONVILLE, Oregon, }
January 12th 1865. }

SIR :—I have the honor to submit the following report of the expedition under my command, the orders authorizing it being as follows :

HEAD QUARTERS DEPARTMENT OF THE
PACIFIC. San Francisco, California }
March 18th, 1864.

Lieutenant Colonel C. S. Drew, First Oregon Cavalry, Camp Baker, Oregon.

Sir :—In reply to your letter of the 9th instant, making certain recommendations relative to the movement of troops from Fort Klamath, the General commanding the Department directs me to say that he wishes you to take all your men back to Fort Klamath as soon as the route is practicable, there leaving a sufficient number of men at that post to safely guard the public property and protect it from any Indian attack. You will go with a detachment across the country to the Owyhee. After the comple-

tion of the reconnaissance, you will return to Fort Klamath, reporting in writing to this office. Such additional transportation as may be absolutely necessary will be hired.

Very Respectfully your Obedient Servt,
[Signed] R. C. DREW.
Assistant Adjutant General.

The greatest difficulty under which I labored before starting out was in obtaining the requisite means of transportation. The character of the country to be explored was believed to be such as would render pack mules indispensable, and there were no trains of these in this region of country to be hired on government account. The Columbia river and "Northern Mines" had been, and still were, the point of attraction for the owners of all that means of transportation which had been formerly employed in this vicinity, and trains from remote regions were hastening to the same lucrative field of operations. The trains finally procured were purchased in such numbers and at such times and places as could be found, here and in California, many of them

valuable team mules, and the purchase made solely for this service, the purchasers having no use for them when the service should be ended. The wages and subsistence of the necessary number of packers—except one, only—is included in the hire of the trains; as men experienced in this business could not be obtained here at the rate of pay allowed by the government. Sixty-five to Seventy-five dollars per month, in coin, and subsistence, were the rates paid, and these are the usual rates of the country for good packers. For cooks, forty dollars per month, coin, was the lowest rate paid, this also the usual wages for that kind of service.

My command consisted at first of forty-seven enlisted men of company "C," 1st Oregon cavalry, under Captain Wm. Kelly—but subsequently reduced to thirty-nine enlisted men—Acting Assistant Surgeon G. W. Greer, eight Quartermaster's employees, including guide, blacksmith, teamsters two Indian scouts and twelve packers whose pay is mentioned as being included in the hire of the trains.

The enlisted men were armed with rifles, sabres and Colt's revolvers, and employees with rifles. The employees, and the packers hired with the trains, performed guard duty at night throughout the reconnaissance.

The means of transportation used were, one six mule team, and one four-mule team—made up with public animals, all that could be spared from Fort Klamath, leaving there only sufficient for a post team—one hired team of four animals, and eighty-six hired pack mules. It had been my intention to send the wagons back to Fort Klamath on our arrival at the Sierra Nevada mountains, as our supplies would

then be considerably reduced, and it being considered doubtful whether the country beyond would readily admit of their passage; but having left Fort Klamath with the mules excessively loaded—some of them with four hundred and twenty-five pounds, each—they could not be dispensed with; and beyond that point we were too far into the hostile Indian country to render it safe to do so without sending back an escort, which I could not spare.

The detachment which had been stationed at Jacksonville during the winter, in charge of the animals belonging at Fort Klamath, and the pack trains, left that point on the 26th of May, crossed the Cascade mountains on the 28th, several miles of the route over their summit having been previously opened under my direction, through a depth of more than nine feet of snow, and arrived at Fort Klamath on the 30th.

Indian affairs in the vicinity of Fort Klamath having assumed a rather threatening aspect, on account of Indian difficulties farther northward, the presence of the whole command was necessary until the Indians should manifest some assurance that they would remain peaceable. Meanwhile, to save expense, the pack trains were employed in the transportation of supplies from the public storehouse in Jacksonville, and a change effected in the contract for the hire of the mules so that payment therefor should be made per pound instead of a per diem allowance for each animal employed.

Our preparations being complete, and Indian matters comparatively safe, Captain Kelly left Fort Klamath with the command on the 28th of June, proceeding thence to Williamson's river, and the fol-

lowing day to Sprague's River Valley, where I joined him on the 1st day of July.

GENERAL DESCRIPTION OF THE COUNTRY ALONG THE ROUTE.

The main topographical features of the country between Fort Klamath and the Owyhee region may be considered in two sections, possessing similar characteristics in some respects, but in others entirely distinct from each other.

First Section—Between Fort Klamath and the Sierra Nevada Mountains. Distance one hundred and forty miles. To the new pass one hundred and thirteen miles. General direction east, southeast.

Commencing at Fort Klamath, the direction of the route is a little, east or south for a distance of four and a half miles to a point on the east bank of the marsh which bounds the north end of Big Klamath Lake, and nearly opposite the northern extremity of the Lake itself.

From this point the road crosses, by an easy ascent and descent, the ridge which form the eastern rim of the Klamath basin or valley, in a direction nearly east, and thence continues in a northerly course to a ford of Williamson's river.

Williamson's river takes its rise in Klamath marsh—or as the Indians claim, in Klamath Lake proper—and running in a southerly course about thirty miles empties into the east side of Big Klamath Lake sixteen miles south of Fort Klamath. It is a considerable river—at the ford probably one hundred yards wide. It is somewhat alkaline, and rendered more unpalatable from having its source in swamps and salt marshes. The crossing is over a ledge of volcanic sandstone extending entirely across the river and into the banks on either side. The greatest depth of water

is about three feet, and this only for about ten yards. From this ledge the water falls about two feet into a deep eddy below.

The soil immediately along the river is a dark sandy loam, but changes to a light granite, or volcanic ash, as we approach the uplands and mountains on either side.

The country between Fort Klamath and the ford of Williamson's river is covered with a fine forest of yellow and sugar pine, with now and then a white or red fir, and occasionally a good sized cedar, Cottonwood, or rather aspen, is frequent around the glades and along the smaller streams. There are also small forests and thickets of a species of pine having as yet no popular name, and are seemingly peculiar to the Cascade Mountains. Fort Klamath is built in a beautiful grove of them, and they cover the summit of the Cascade Mountains along the northern base of Mount M'Laughlin where the road crosses between Fort Klamath and Jacksonville. They are probably of the species denominated *Pinus Contarda*.

From Williamson's river we passed eastward over a succession of low gravelly hills, and intervening glades, to Sprague's river, reaching it at a point about six miles above its intersection with Williamson's river, of which it is the main tributary. Thence along the north bank of Sprague's river over an undulating country, and a considerable spur of the mountains extending down from the northward, around the point of which the river makes its way through a somewhat deep rocky cañon.

From the summit of this spur Mount Shasta, Mt. M'Laughlin, Union, Scott's and Diamond Peaks, with many other snow topped peaks and buttes of the Cascade range, and not yet named, are offered

at one view, and present a grand appearance. Descending this spur by a fair grade we enter Sprague's river valley. The road to this point, except the first four and a half miles from Fort Klamath, passes over what may very properly be called a hilly country; but presenting no obstacles whatever to pack animals or loaded wagons. The country passed over is abundantly watered by rivers mentioned, and by springs, affords good grazing and is heavily timbered.

Leaving the point of our entrance into Sprague's river valley, we continued up the river four miles and crossed it over another sandstone ford like that of Williamson's river. The river here is about thirty yards wide, having an average depth of about eighteen inches, and a gentle current. It is slightly alkaline, but abounds with mountain and salmon trout, and all other varieties of fish that are common to the Klamath Lakes.

Sprague's river valley is about forty miles long, and from two to fifteen miles wide. Its general direction is from southeast to northwest. The banks of the river, and of the numerous streams putting into it on either side are fringed with willows and cottonwood, and the entire valley is skirted with a continuous forest of yellow pine, extending back to the summit of the mountains by which it is bounded. It possesses all the natural requisites for a good stock range, its low lands being covered with a fair growth of marsh grasses, while its uplands afford a bountiful supply of the more nutritious bunch-grass with an occasional spot of wild timothy.

The soil here is a dark sandy loam, growing lighter and somewhat gravelly towards

the mountains. Outcroppings of lava and other volcanic products are general, but there are many tracts of land that offer eligible farm sites and could be easily cultivated.

The climate is similar to that of Fort Klamath, but the soil is quick and vegetation matures early.

Wild flax grows here so abundantly that in many places it presents the appearance of tolerable fair cultivation, and produces a fine strong fibre. The stalk seems to spring from its root and continues to grow until checked by the frosts of autumn. In this way it seems probable that the old root retains substance enough during the winter to send out new shoots in the spring.

The most prominent mountain peaks in or around this valley, are Wildrick's Buttes—a spur of the Lost river range—rising by a gradual ascent from the south side of the valley, near the western extremity, and dividing near the summit into two beautifully rounded peaks of about equal height and like form. These buttes form the principal land-mark to the westward upon entering the upper portion of the valley from the direction of Goose Lake. They are covered with a good growth of yellow pines, and at a distance seem to be disconnected with any mountain range.

Bear, antelope, and deer, are abundant in this region, but as they are much hunted by the Indians, they are wild and difficult to approach. The southeastern portion of the valley is a favorite range for a species of the deer known as the "mule tail" so called from the near resemblance of their latter appendage to that of a mule after it has been trimmed in the approved Kentucky fashion preparatory to its wearer be-

ing put into the market.

The wagon route from Yreka, California, to Cañon City, Oregon, or to Ft. Boise by way of the Malheur, crosses Sprague's river valley near its center and about fifty miles from Ft. Klamath. It was on this route that Richardson's and other trains, *en route* to the northern mines, were attacked, June sixth, by Indians of the Snake chief Pauline's band, forcing them back across Sprague's river.

The Indians occupying and claiming Sprague's river valley, are a small band of Klamaths, having among them a few of the Snake tribe, who border them on the north and east, and having a Snake-Klamath—Moshun-kosk-kit—for their chief. They are physically superior to any of the Indians about the border of the Klamath Lakes, and possess more manhood. They seldom beg and are not known to have ever extorted, or otherwise mistreated any citizens passing through their country. They claim as the boundary of their country the summit of the mountains which surround Sprague's river Valley, the Lost river range being the line between them and the Modocs whose country lies immediately to the southward and extending down to the vicinity of Pitt river. They seem well enough disposed towards a continuance of peace with the United States, but in the event of a general Indian war they would doubtless prove more dangerous and troublesome than any of the other Indians of that region. It was just previous to our arrival among them that the hostile Snake chief Pauline tried to induce them, with the Klamath's generally to join in the murderous operations he was then conducting, and the subject had evidently been warmly discussed; but the chief remained

steadfast for peace, and his counsels prevailed.

This state of affairs however did not suit the inclinations of some who were present with the command, whose desire and aim was to return at once to Fort Klamath, and the attack upon Richardson and others, made entirely beyond the limits of these Sprague's river Indians was nevertheless charged directly upon them for the purpose of creating a difficulty that would necessitate the abandonment of the reconnoissance to quiet. No evidence could be adduced against them, on the contrary all the evidence that could be obtained was decidedly in their favor, as they had proffered kindly offices to Richardson and his party when they were retreating from Pauline back across Sprague's river.

To overcome any suspicion however that might honestly exist against these Indians, or that might afterwards arise from the same circumstances, I took with me the guide, John E. Ross, Mr. Brown and Mr. Taylor, two other employees connected with the command, Mr. Gabb of the State Geological survey of California, and Mr. Richardson, and proceeded to the camps of the Indians to inspect and investigate more fully than had been done through their visit to us. We gave no warning of our intentions, or approach, and though inspecting and scrutinizing the actions of the Indians and everything about their camps as closely as possible, we found nothing whatever indicating that they were in the attack upon Richardson, or that they had anything whatever to do with it, or, that they were co-operating with or aiding hostile Indians in any manner whatsoever. Mr. Richardson *did not* identify any of these Indians as having been among those who

attacked him, nor could he discover any vestige or sign of the property he then lost; and further he urged that these Indians should not be in any way held accountable for what transpired beyond their limits on the 24th of June. We returned to camp satisfied of the innocence of these Indians as to the matters charged, and on the following morning I made such changes in the command, and respecting the administration of affairs at Fort Klamath as would prevent the creating of Indian difficulties, and the consequent failure of the reconnaissance.

Passing out of Sprague's river valley in a southeasterly direction we crossed the Goose Lake Mountains through a wide and smooth gap, and by an easy grade, and entered a small fine valley situated to the westward of the northern extremity of the valley around the upper portion of Goose Lake, but having an outlet into it some distance down its western border.

This little valley is about fifteen miles long, having a general direction from north to south, and has an extreme width of about eight miles. It has a southern exposure and a fertile soil. Its surroundings on the north, east, and west, are timber-covered mountains, while a low range of grass-covered hills bound it on the southward, separating it from the basin of Goose Lake. It is well watered by several mountain streams, and by springs, fringed with willow, and in some places with the cottonwood, and is covered with a luxuriant growth of grass. Its soil excels that of Sprague's river valley in its general adaptation to agricultural purposes. A considerable creek puts into this valley near its southern extremity, from another valley of about the same size, situated

about twelve miles to the westward, or rather north of west, in what is known as the Modoc country.

From a point on the east side of the little valley into which we had entered, and about twelve miles from its head, we diverged to the eastward, and passing over some low grassy hills and along the bank of a small mountain stream running in a southeasterly direction, we descended into Goose Lake basin by a very easy grade, through a remarkably smooth depression in its western rim.

From this pass to the head of Goose Lake, the first four miles was across a sage desert that extends southward down the western border of the lake as far as the eye can see.

From this desert to the head of Goose Lake the surface of the country is undulating, though from any considerable distance it has the appearance of being entirely level.

The uplands are generally covered with a luxuriant growth of bunch grass, but in many places the outcroppings of lava renders them unfit for other than grazing purposes. For these however they excel any portion of the country yet passed over.

The lowlands along the numerous little streams, all putting in from the northward and converging towards the head of the lake, but generally sinking before they reach it, are extremely fertile, and well adapted for cultivation. A small portion of them, bordering immediately on the lake, are somewhat alkaline, but produce in many places an excellent growth of rye-grass, and other vegetation incident to a moderate alkali region.

The valley is beautifully studded with large willows and some cottonwood that

fringe its streams, and timber of good quality is abundant and easy of access around its northern extremity and down along its eastern border.

The main portion of the valley, from its northern extremity down to the lake, is about twenty miles in length, and from the Sierra Nevada Mountains which bound it on the east to its western rim, the distance is nearly the same. In this area is contained the most valuable agricultural lands of the Goose Lake basin.

Along the eastern shore of the lake however, there is considerable good grazing country, with an occasional tract of good farming land, covered with luxuriant wild clover in addition to all the wild grasses common to the fertile portions of the country.

Numerous creeks and springs of good water put into the east side of the lake from the Sierra Nevada Mountains.

Timber is also abundant along the base of the Sierras, up their ravines, and in many places up their sides to the summit.

In the way of game, antelope and deer are quite plenty, and "old bruin" is met occasionally. Sandhill cranes, ducks of every variety, curlew, and all other fowls incident to California, are abundant throughout this region, and along the streams in the upper portion of the valley we saw numerous "signs" of otter.

The lake is emphatically alkaline, but abounding with fish near its main inlets. Its surface is beautifully dotted everywhere with flocks of swan, resembling, through mirage, so many fleets under sail.

Mirage exists here to about the same extent that it does in and around San Jose valley California.

Near the head of the Lake there are several hot springs—one of them at the Junction of our route with that from Red Bluff, California, to Boise, via the Malheur, we found sufficiently hot to boil meat, the Indians having evidently used it for that purpose. The water is clear, but impregnated with some unpalatable substance which forms a reddish incrustation around its rim and along either side of the streams which flows from it.

The emission of steam from these springs is constant, resembling at a distance of one to ten miles, small clouds of dust for which it may be easily mistaken.

The route from Red Bluff, California, via Ft. Crook, to the Boise region, passes between the Sierras and Goose Lake. It was on this route and but a short distance north of Goose Lake valley that the Indians attacked Tower & Co's train, in July, killing two men and capturing three hundred head of cattle. Other depredations of like character were evidently committed there during the summer.

Captain Warner, Topographical Engineer, passed up on the west side of Goose Lake, in his exploration of 1849, but no traces of his route are now visible.

Among the Snakes, Modoc, upper Pitt River, Klamath and Pinte Indians, Goose Lake valley, or that portion of it which lies to the northward of the Lake, is neutral ground; neither tribe claiming it especially, but each using it at will for hunting and fishing, and gathering the wild rye for winter food.

During our stay in this valley there occurred one of those incidents, that are unfortunately too common on our frontier, and often end in the injury or murder of

innocent and unoffending citizens:

On the 17th of July, our two Indian scouts being up in the Sierras, found a party of twenty white men there, who had left the Owlyhee mines some weeks previous to prospect some of the head waters of the Malheur, but for some reason had failed to reach any portion of that stream, and were now trying to find their way into Surprise Valley. Our scouts informed them of our whereabouts, proffered to guide them to our camp, and the service was accepted. The scouts also brought with them three of the principal Snake Indians of that region, whom they were anxious we should see. These Indians came into camp on foot and unarmed, having left their horses and their arms, if they had any, some distance back in charge probably of some of their comrades. Some of the party of white men saw the horses after the Indians had left them, but seeing no Indians, they seemed to have made up their minds that an Indian has no rights that a white man is bound to respect, and, consequently, that these horses were legitimate plunder. Both parties remained near our camp over night, and next morning, under pretext of going out for a hunt, four of the white men preceded the Indians on the route back to the horses, waylaid it and fired upon the Indians upon their approach—but seem to have done no damage. The white men got possession of two of the horses, but the Indians having either reached their guns or being joined by those who were armed, a skirmish ensued, resulting in the instant killing of one of the white men named Burton, and the dispersion of his three comrades in as many different directions. Burton was shot with a rifle, directly through the head, and from the front,

after having mounted one of the Indian's horses. When his body was found, the horse, and another of which possession was gained at the same time, was yet standing by it; one of them so badly shot, however, that it died a few days afterwards. Burton was doubtlessly bullied into this affair early in the morning by the three men that went with him, as it appears that upon their suggesting to him their plans, and inviting him to join them, he at first declined having anything to do with the affair; but upon their taunting him with the term "Indian sympathizer," and applying to him other terms equally objectionable to frontiersmen generally, he consented to join them, remarking as he did so that he was the last of four partners who had not been killed by the Indians, and it made little difference what should become of him. The Indians here, however, he did not charge with having ever committed any offence against him, or anybody else; nor did he or his comrades claim the horses as their property, or as even not belonging to the Indians.

Upon the very first intimation of the design of these men to waylay the Indians when I should send them from camp, I ordered a detachment in pursuit, to prevent any outrage upon the Indians that might be intended, and to bring back the white men. But it was too late to benefit even the aggressors; for upon the arrival of the detachment at the place of difficulty, Burton was already killed, and neither of his comrades or any of the Indians were anywhere to be seen. The detachment returned, bringing in the body of Burton and the two horses, and finding on the way back one of the other three comrades, in sound condition, and evidently somewhat wiser for

that morning's experience. The other two came in subsequently with another detachment, sent by another route to reinforce the first, as there was no way to ascertain the strength of the Indians, or the attitude we should assume towards them, except by actual observation. The Indians seemed to have comprehended, however, that the troops were in no way responsible for the outrage that had been perpetrated, and they made no hostile demonstrations whatever towards us. Subsequently these Indians were represented in a treaty council held with the Klamaths by Mr. Huntington, Superintendent of Indian affairs for Oregon, and expressed a willingness to go upon the Klamath Reservation, when the treaty should be ratified.

The details here related, as to the origin and maturity of the designs to gain forcible possession of the Indian's horses, were subsequently given to us by one of the main party of white men, not in sympathy with the offenders, but somewhat at fault in not advising us of their intentions.

Leaving the Goose Lake valley at a point twenty-one miles down the east side of the lake, where we were joined by several heavy trains from Humboldt county, and other portions of California, including several families, all moving towards the region of Boise, we again diverged to the eastward, forming a junction three miles out with the old Southern Oregon Emigrant Road, which passes around the south end of Goose Lake, and thence westward into either Shasta or Rogue River valleys, and entered the lower portion of a beautiful glade, putting down from a point about a mile and a half from the summit of the old Emigrant Pass over the Sierras. This glade is known as *Fandango*

Valley; so-called from a night attack having once been made by the Indians upon a party of immigrants while they were celebrating the opportune arrival of friends with much-needed supplies from California, and as is too often the case had neglected to guard their camp. This little valley, or glade, is about five miles in length by two miles in width, and affords excellent grazing and good water.

From this point to the summit of the pass the ascent is very abrupt, requiring double teams to wagons moderately loaded, and then the journey is slow and tiresome. A little labor, however, and a change in the location of the lower portion of the road, to a spur of the mountain about a mile to the northward, would render the grade comparatively easy.

From the summit of this pass we obtained a splendid and extensive panoramic view of the Sierra Nevada mountains, along the range both north and south of us, while directly beneath us, stretched along their eastern base, farther to the southward than the eye could reach, lay Surprise Valley, of which so many fulsome accounts have been published during the past two years. To the eastward of this valley, however, was presented the melancholy spectacle of successive ranges of high table lands, covered with black volcanic rock, destitute of water, no timber except juniper growing in occasional patches on the most inaccessible spots, with very little grass, in fact almost entirely without any vegetation except the sage, which is everywhere present on the great desert of which this region forms a part.

From the summit of this pass down into Surprise Valley the route is precipitous, but might be much improved by a little

grading and change of location.

Surprise Valley is a long, narrow strip of land, stretched along the eastern foot-hills of the Sierra Nevada mountains, and sloping down into alkaline lakes, and the sand and sage desert that forms its eastern boundary. These foot hills, and the lower portions of the spurs are generally covered with a bountiful growth of bunch-grass, while between many of them, and sometimes extending out around them towards the dreary waste to the eastward, are small tracts of excellent tillage land, covered with grass, rushes, and spots of clover and wild pea vine. It is well watered by springs and streams putting down from the Sierras, but these usually sink on reaching the level of the lakes, and the sage fields into which they flow.

Timber, pine, is abundant along the Sierras and of fair quality. Game of all kinds common to California, seems to be plenty.

The general direction of the valley is from north to south, inclining considerably to the eastward as we approach its southern extremity. It is about eight miles wide where we crossed it, just north of the old Southern Emigrant route, and pass, and near its northern extremity, and it seems hardly probable that it is much if any wider anywhere else. It was asserted that fully seventy land claims were located here previous to our visit to it, though of the claimants it was said that not more than about forty were then present in the valley. Some of these are without doubt *bona fide* settlers. Dreamy visions of eligible town sites, and valuable timber claims for supplying the so called Pueblo mines with lumber, and an unfounded claim to the discovery of the valley, has had much to do

with the flattering accounts that have been published concerning it, and have been the means of drawing to it the greater portion of its present population.

All the population of this valley is in dangerous proximity to the ever hostile Indians who infest the whole of the surrounding country, and by whom it is liable to be molested at any moment.

The old Southern Oregon Emigrant road by way of the Humboldt, crosses this valley, and has been used more or less by the overland immigration to Southern Oregon and Northern California, since 1845.

In 1845, Hon. Jesse Applegate, who was thoroughly identified with the interests of Oregon during her entire territorial pupilage, as he has continued to be since she has advanced to the sovereignty of a State, passed from the Willamette valley through those of Umpqua and Rogue River, thence across the Cascade and Sierra ranges of mountains, as the Southern Emigrant road is located, and onward to the vicinity of Fort Hall; returning by the same route with a portion of the overland immigration of that, to the immigration, most fatal year. The credit therefore for the exploration of the Southern Oregon Emigrant road, and the discovery of the pass over the Sierras, as well as that across the Cascade Mountains near the head of Rogue River valley, is due to him, and as a consequence, the credit for the discovery of what is now Surprise valley.

It appears from the best data at hand that Captain Warner, U. S. A., was killed in Surprise valley, September 9th 1849, at a point about twelve miles south of the old Emigrant pass.

The Lakes of Surprise valley—three in number—are so strongly alkaline as to be

utterly unfit for any use whatever. The upper, or the most northern of the three, was about eight miles long and three miles wide when we passed it, but its depth was not more than about four feet. This and the next one south of it are known to have been dry several times since their original discovery, and their beds covered with an incrustation of alkali.

From this pass of the Sierras, the old Emigrant route crosses Surprise valley diagonally, diverging far to the southward, and the region through which it passes being somewhat familiar to a considerable portion of the people of California and Oregon, it was decided that our course should be as near along the forty second parallel of north latitude, as the nature of the country would admit of our passage with wagons.

Several of the heavy teams—Allen's train—that had traveled under the protection of the command from Sprague's river, decided to keep along the old route *via* Black Rock Cañon and the Humboldt, thence northward to the Owyhee mines;—their owners not liking to venture again into an unexplored region, more especially the dreary, uninviting one upon which we had decided to enter. Richardson, Morgan and others.—in fact all of the California trains, including nine families, resolved to remain with the command and under its protection, and profit by its success or share its defeat. In one of these trains there were over twenty men, having in the way of arms but seven pieces, rifles and revolvers.

The whole number of horses, mules and cattle to be guarded and cared for under these circumstances was hardly less than thirteen hundred, and in addition a consid-

erable amount of merchandise. Some of the teams, too, used in the transportation of these goods were oxen, which being at best slow to start in the morning, slow to travel, and, consequently late to reach camp, made the duty of guarding them during the day doubly laborious, both to men and horses.

SECOND SECTION.

Between the Sierra Nevada mountains, at the old Emigrant Pass, and the Owyhee river by way of Pueblo val'ey. Distance two hundred and eighty-six and a half miles. Direction, northward, east, southeast, northeast, north, and again east. Continuation of the march to the Owyhee mines, thence to Boise.

Passing diagonally across Surprise Valley in a northeast direction, we made the ascent out of it by an easy grade, up several narrow banks or steppes, and over successive ranges of the foot hills of the Sierras, presenting alternate patches of fragmentary lava and slate, we entered by a gentle descent, into a very small valley or trough in which is situated a small tule lake. This trough, as it may properly be called, is about five miles in length by two miles in width. Grass along its western limits, towards the Sierras, is abundant and of good quality, much of it the nutritious bunch-grass. Putting in from a partially snow topped mountain of the Sierras, is a small stream of pure cold water, and several excellent springs burst out along the foot-hills that form its western limits. The water of the Lake is poor however, owing to the fact that it contains a large amount of decayed vegetable matter, of its own production, and having no regular outlet. The springs and streams are fringed with willows, and in many

places almost hidden by manges of wild parsel. The chief reliance for fuel is the Juniper, which is somewhat abundant on the surrounding hills.

Our route thence was in a northeasterly direction, down a flat-bottomed cañon, leading into Warner's valley for the first mile and a half, and thence up a lateral ravine to the general summit level of the table beyond. Thence varying our course more to the eastward, and passing over fields of lava almost impassable for our wagons, we entered Warner's valley at its southern extremity.

This valley we named for Captain Warner, U. S. A., who explored it, and who, as we at first supposed, was killed—Sept. 9th, 1849—in the main cañon putting into it from the south, the same that has just been mentioned. John S. Drum, Esq., of Jacksonville, Oregon, who was connected with Capt. Lyon's command that went in search of Warner's remains the next year, 1850, locates the point at which some of them were found a few miles south of the old Southern Oregon Emigrant Road, and consequently the fatal spot must be in Surprise valley.

Warner's Valley is similar to Surprise Valley in point of location, form and general character. Its direction is from south to north. The Sierras form its western boundary for a distance of about fifteen miles from its southern extremity, thence receding to the westward, and leaving a volcanic table to continue its border northward.

Springs and streams are found at convenient distances along the base of the Sierras, and two or more streams find their way from the same source, through deep chasms in the table that continues its west-

ern rim.

The soil is generally alkaline in the strongest sense of the term. There are however, along the base of the Sierras, and occasionally in the range further northward, small tracts of good land, bearing good grass, mixed in some places with excellent clover and wild pea vine. On the east side of the valley for a distance of fifty miles we found but one considerable spot of good soil. This is at a point forty miles down from the valley's southern extremity, and covers perhaps an area of about four thousand acres; bearing a luxuriant growth of the common wild grasses mixed in many places with thrifty red clover and wild pea vine. On this tract there are also several fine springs pressing upward through the surface, and a small stream putting down from Warner's Mountain, and heavily fringed with willows.

On the east, the valley is bounded like all others along the eastern slope of the Sierras, by the same interminable sage desert, which here, as in other places, is heaved up into wide volcanic tables, on which are mounted low hills and isolated buttes of the same volcanic formation. Occasionally one of these buttes rising higher than its fellows entitles itself to the more dignified rank of mountain. Such is Warner's mountain, of which mention will be again made in another part of this report.

Through the center of the valley lengthwise there are numerous lakes, mud ponds, water-holes, wells and springs, connected by marshes bearing a species of cane, growing in many places fully nine feet high and very dense. None of these lakes or reservoirs have any visible outlets, and it was very seldom that we saw an inlet. The

wells, as they are designated, are seemingly without bottom, and always full to within three or four inches of the surface around them, and the water generally quite good. The water in these depositories, however, differs in quality and temperature, even when situated within a few feet of each other. This is characteristic of the springs also that are on the east side of the valley on higher ground, where they frequently discharge from the summits of little mounds perhaps eight or ten feet across, and from eight to twenty inches higher than the surface of the ground around them. These springs also differ in temperature and quality, some of them being tolerably cool and pure while others are almost tepid, and some of them seemingly impregnated with some kind of mineral.

In the way of timber, the willow is all that this region affords, except an occasional juniper.

Game is scarce. We saw a few mountain sheep, but always beyond rifle range. These and the grey rabbit, with a few sage hens, seemingly constitute the game of this region.

Fish—a small chub—are plentiful in some of the larger lakes, but are too soft and ill flavored to be worth taking.

Captain Warner passed southward along the west side of the valley in his exploration of 1849, but no trace of his route can be seen.

It is probable that one of the lakes here is Fremont's Christmas Lake of 1843. A bare vestige of an old trail is visible for some eighteen miles south of this lake along the east side of the valley, but beyond that point it cannot be traced.

Warner's mountain is a continuation from the southward of the eastern rim of

this valley; but rising majestically to a height that rivals many of the higher portions of the famous Sierras. Its valley-side is exceedingly steep, in many places forming solid, perpendicular, and even over-hanging walls of volcanic rock, cut here and there with steep ravines and chasms putting down from the summit. As evening approaches, and the sun is shining, its rocky sides and numerous peaks present a beautiful bronze appearance, of a greenish hue, similar to that which is sometimes found in veins of copper ore.

The summit has a general level, extending over an area of more than a hundred square miles, and presents all the features of a country by itself; possessing its little miniature mountains, grass covered valleys, lakes and rivers of pure water, its little willow, aspen, and mountain mahogany forests, and its gardens of service berries.

In a military point of view, this mountain is the Sebastopol of the Snake Indians; producing subsistence and forage within, its walls impregnable, and so high as to render artillery effective from their base, offering but few approaches to its summit, and these capable of an easy defense from the numerous impregnable bastions and watch towers that guard their entrance on either side.

Our reconnaissance of this mountain was from the south along its western base to its northern extremity, where its ascent is directly up from the waters of Christmas Lake, thus blocking our passage around it in that direction, thence back by the same route to its extreme southern point, there ascending the table upon which it rises we passed along its eastern base to a point opposite that which turned us back. The evidences thus obtained were conclusive that the Indians did not occupy the moun-

tain permanently, but that it was one of their strongholds in time of war, and a point where negotiations and trading with the Piutes were carried on at any time; its location being on the line between the Piutes and Snakes.

The most practical of the passes leading up into the mountain are at its southeast extremity. The one most generally used by the Snake Indians however, is on the opposite side, leading in from the northward, and passing up from a point nearly opposite the south end of Christmas Lake; the trails of the Snakes from the northeast and west converging to it. These trails were well beaten but gave evidence of not being in constant use.

Indian "sign" was plenty from the time we entered Warner's valley; but we saw no indications of any unusual force being near, until we reached the north pass up Warner's mountain, the one last mentioned. Here we found about sixty new and deserted lodges, evidently left not more than three days before, and in and around them fragments of beevves that their occupants had feasted upon. The tracks of American horses, ponies, mules and cattle, all coming in from the northward, and passing up into the mountain, were numerous and but recently made.

The news of the attack by the Snake chief Paulini and his band upon Captain Drake's command near Cañon City in May previous, in which Lieut. Stephen Watson was killed, had reached us before we left Ft. Klamath. The affair by the same Indians with Richardson and others at Silver Lake, we also had full knowledge of. From these facts and the indications here presented, it was evident to us that Paulini and his Indians had fallen back to

and were occupying this mountain for safety and the enjoyment of their plunder.

This supposition has been partially confirmed by Paulini himself, who states that he was there at that time, and that he prepared twice to attack us; but that he did not do so because we kept too closely guarded, and because he was afraid of the "big gun" our twelve-pounder Mountain Howitzer. This is Indian testimony, of course, but the same Indian gives a very accurate description of our camps and route from the Sierras to and around Warner's mountain. He also describes very accurately our order of marching, putting the Howitzer in position immediately upon our arrival at camp, picketing and guarding our horses in the daytime, and tying them close and guarding at night, and other details that were enforced during the entire reconnaissance, and which he must have learned as he says he did, by following us from the Sierras down into the country of the Piutes.

We were in the vicinity of the main body of these Indians upwards of twelve days; anticipating, and prepared for an attack from them at any moment. Having a force of only thirty-nine enlisted men, and several families under our charge, and property to the value of perhaps one hundred and forty thousand dollars to guard, not including our own supplies in the estimate, I deemed "discretion the better part of valor" and avoided acting upon the offensive, though always choosing ground for the alternative should it be forced upon us. To have attempted the offensive with so small a force, and under the circumstances named, would doubtless have been futile, and probably disastrous; as it would have involved the necessity of dividing our strength and

thus jeopardizing the safety of our camp, trains and supplies, while our whole force would have been insufficient to attack the Indians with any chance of a successful result.

Stein's mountain is visible from Warner's, being almost due east, and distant forty-seven miles. Another high mountain is also visible to the northward, seemingly isolated in its position, and is probably in the vicinity of Harney Lake. Some of the mountains around the Pueblo District are also visible in a direction a little east of south.

From Warner's mountain to Pueblo valley, so-called, we passed in a southerly direction over the most sterile country we had yet seen; hardly a spot of grass that was in any way beneficial for our animals to eat, for a distance of fifty miles, and no water except a small muddy alkaline lake, rendered unpalatable by being the common rendezvous of countless ducks, geese, and all other species of water fowls common to the country. By digging holes along its bank we obtained water that was barely endurable for cooking purposes, but not at all palatable to drink. This we named, as its character suggested, Guano Lake.

The Indian trails from the direction of Warner's mountain, and that vicinity, all except one, which leads to the eastward, converge towards the head of this lake, where they join and form a wide, heavy beaten track, which continues thence southward towards Pyramid Lake, and is doubtless the main Indian thoroughfare between that region and the Snake country. On this trail were fresh tracks of several American horses and numerous Indian ponies; also, of a heavy team mule newly shod, rendering it apparent that the In-

dians of Warner's mountain were still hovering around us, watching our movements and seeking an opportunity to attack us.

Near this lake, one of the ladies of the trains traveling under our escort, was taken violently ill, taxing the skill of Dr. Greer to relieve her, and requiring the use of the ambulance for her safety and comfort in continuing her journey.

From this point we passed in a southeast direction out of the basin or trough in which the lake is situated, by a low and smooth depression in the rim, and entered upon a seemingly interminable field of the ardest and most vigorous sage we had yet seen. The surface of the country immediately along our route was generally clear of rock, smooth and quite firm; but the large sage was a severe clog to our wagons, adding greatly to the labor of our teams, and the fatigue of the command. Our lady patient, too, being regarded at the point of death, and requiring, as all believed, a halt of several days to save her, if indeed she could be saved at all, added to the general gloom and intense anxiety of that day's march. To halt where there was neither water or grass for miles around was impossible, and added to this was the uncertainty of reaching water, at the best, for a night and a day to come. Our Surprise Valley guide knew where there had been springs in June previous, at the point to which we were directing our course; but it was now the 14th of August, the time when springs that are not living fountains usually go dry, and our faith that we should find water at this season anywhere on the wide waste on which we were journeying, was hardly greater than the grain of mustard spoken of more than eighteen hundred years ago. However, after two

ty-seven and a half miles of hard marching, we reached the springs which had been so anxiously coveted during the day, and found ourselves "as well as could be expected under the circumstances."

These springs burst from the east side of a high table mountain, having a conical peak mounted upon its summit at this point, which is visible from Warner's mountain—fifty miles distant. The largest of these springs leaps directly out of the solid rock of the mountain's side, well up towards its summit, and all flow through a grassy ravine wide enough for the passage of wagons, to the desert below. In compliment to our guide we named them "Isaac's Springs."

In addition to good water, there is here an abundance of excellent bunch-grass, growing upon the narrow steppes that rise one above another, and form the mountain's side, and also on the summit of the mountain itself.

The Indians who had so long and zealously watched and guarded us, abandoned their post at Guano Lake, not having followed or preceded us past that point.

We were now clearly in the country of the so-called Piutes, all of them claiming to be "Winnamucca's papooses," but over whom that chief exercises no apparent control either for good or evil. The Indians of this region, calling themselves Piutes, are evidently outside bands of Snakes having no recognized chief, and having their habitation anywhere between Warner's mountain on the north, the old Southern Oregon Emigrant road on the south, the Humboldt on the east, and the Sierra Nevada mountains on the west.

From Isaac's Springs we proceeded in a southerly direction, in the same intermina-

ble field of sage, but by a gradual descent to Pueblo Valley; passing down a wide canon, having in many places high perpendicular walls on either side, and entered a small tributary valley of the Pueblo, watered by a creek putting in from the northwest, through a deep chasm in the high table that encircles the valley, except at its southern extremity, and breaking at its northern sufficient to admit of our entrance. This creek evidently has its source in some alkaline lake, perhaps in the nauseous Guano, and slightly cooled and probably otherwise improved by falling down precipices, and running through shady chasms. Grass along its banks, from where it enters the valley down a distance of about four miles where it sinks, is plenty, and for the region is of a very good quality. The surface of the valley is very uneven, but strikingly uniform in its elevations and depressions, resembling the waves of a large lake suddenly stopped after a steady gale. In other words, it seems to have been cut entirely too wide for the place it covers, and then to have had its side, first pressed down inside of its volcanic walls, leaving the rest to fall in any position it might. The surface of some of these waves are moist and elastic, yielding readily to a gentle pressure of the foot, and resuming their shape when it is taken off. All of them—and they would number by the thousand—range parallel with the walls on either side, north and south; and as we had to cross them diagonally in entering Pueblo Valley, we were forcibly reminded of the decidedly unpleasant sensations we had felt when voyaging on the Caribbean Sea after a severe gale.

The Indians of this region are not very numerous, nor are they very shy of white

men. They have hiding places in the caverns and recesses of the surrounding mountains, to which they retired every night while we were in their vicinity, returning to the valley again in the morning, and the males occasionally visiting our camp. One of these calling himself "Humboldt Jim"—a borrowed name, doubtless—could speak some English. He had a fine Philadelphia made rifle, which he was very anxious to sell—a very good indication that he and his comrades did not wish to be considered belligerents, and treated accordingly. They knew nothing whatever of the relative value of gold and silver, one of them, as we afterwards learned, having given a five dollar gold piece for a dollar and a quarter in silver, evidently all the money that any of them had, and was greatly delighted with his bargain, having three pieces of money instead of one, and each of the three much larger than the one, he seemed to think himself something of a capitalist, and of much more consequence in his tribe than before his success as a broker.

Though appearing every way friendly with our whole force present they were entirely too inquisitive to be agreeable towards some of the command that had been sent in advance with two of the cattle trains to afford better watering facilities at Isaac's Springs for those who were in the rear. They are doubtless assassins by nature, but are too cowardly to attack any party of armed white men unless by surprise.

There is one virtue however, that these Indians are said to possess, that the Indians generally of the Pacific Coast do not. They do not prostitute their squaws nor allow them to turn prostitutes themselves. In punishing the offense however, they manifest

more madness than reason, as the woman is the only party adjudged guilty, and speedy death, often by burning alive, is her portion.

Virtue is here mentioned as it is generally understood among christians, and not in the sense in which it is practiced by the Indians of the western frontier, or other barbarians. Among nearly all the Indian tribes of Oregon and northern California, murder, rapine, robbery and theft, are virtues of the highest order; and in proportion to the number of instances in which these have been practiced, or strictly observed, is the Indian exalted in his tribe. With the Piutes, Snakes, Klamaths, Modocs and Pitt rivers, it is virtuous to seize and ravish the women of tribes with whom they are at war, often among themselves, and to retain or sell them and their children as slaves. The acts which follow the capture of women, under these circumstances are regarded as the greatest tribal insult that can be offered, and the strongest mode of declaring war. This custom is doubtless the true source of the virtue mentioned as being so severely observed by Piutes, if not of the cases of rare christian virtue so often boastfully chronicled as being possessed by the dusky maidens of the forest. Among the Klamaths, children of slave parents who, it may be thought, stand in the way of the mother's more profitable prostitution, or sale, are killed with as little compunction as we would feel at killing a venomous reptile. Children too, who are not slaves, sell their widowed mothers for any purpose for which they can find a purchaser.

Passing around the south end of Pueblo mountain into Pueblo valley, we changed our course up the same towards

the northeast, passing along between the mountain and a small alkaline lake, and near its head a magnificent hot spring, shaped like a deep cauldron, and boiling up directly in its center, passing also what are known as the "Pueblo mines," thence bearing still more to the northward and crossing a point of Stein's mountain, entered the valley of the same name in which was located Camp Alvord, where we met Capt. Curry, 1st Oregon Cavalry, with his command. Stein's Valley and mountain are named in honor of Major Stein, U. S. A., who explored them when opening a wagon road into that region from the Warm Springs, situated not far from Fort Dalles.

Pueblo Valley as it is called, is an alkaline sand and sage plain, containing a few islands of grass, and having partially grass-covered surroundings; similar in all respects to many other portions of the great desert of which it forms a part just equal to its extent. It is about sixty miles in length, having a general course from north to south, diverging a little to the westward towards its southern extremity, and is about twelve miles in width. Pueblo mountain forms its western boundary, and a mountain called Vicksburg, with its continuations to the northward, bounds it on the east. Along the base of Pueblo mountain it is quite well watered by small streams and springs; and across on the opposite side, putting in from the southeast, is a considerable stream called Trout Creek. This stream abounds with fine mountain trout, but how they ever got there is a mystery, as the creek sinks almost before it reaches the level of the plain; and it seems utterly impossible that it could have ever connected with any other stream or body of water.

The best grazing of this region is off Trout Creek, and on Pueblo mountain. Bunch grass is the chief reliance, but there are other wild grasses in spots on Trout Creek, some of them affording a sufficient growth for hay.

The willows along the streams, a few cottonwood trees of very small size, and an occasional mountain mahogany, is all the timber of which this region can boast. The Sierra Nevada mountains, about one hundred and fifty miles distant by any known pass for wagons, affords the nearest timber for mechanical purposes that has yet been found.

The Pueblo mines are in Pueblo mountain. They appear to be mainly copper, though it is claimed by those who own them that they are rich in silver and gold. The population numbers about thirty men, all resident mining claimants, and their employees. Their situation is an extremely isolated one, and except in the way of their rifles, they are wholly unprepared to resist any attack from the Indians, by whom they are surrounded on all sides, and of whom they are hourly in danger. Reports of Indian depredations may be expected from this region at any time, and the prospective owners of the imaginative wealth that is to be taken from these mines may consider themselves fortunate indeed, if during the next year they loose at the hands of the Indians nothing more than their cattle and horses, and other personal effects. They have a four-stamp steam crushing mill in operation, using sage for fuel. Their enthusiastic faith in the immense riches of these mines and the risk of life and all else they posses in developing them, clearly entitles them to a rich pecuniary reward, much greater than it is at

all probable they will ever receive from the source they now expect it. Enterprises of this character however, it seems always best to encourage to a mod-erate degree, especially where the encouragement costs but little, as the public is often the recipient of substantial benefits that are the result of measures whose originators were considered visionary when they first shaped and advocated them. Nothing tends to develope a new country so much as the bright hope that golden treasures are hid beneath its surface; and our Pueblo friends, by dint of hard work, and much delving, may uncover something that will enrich themselves and add to the wealth of the world.

Vicksburg mountain contains mineral, evidently copper, as in the other.

In passing out, near the head of this valley, we discovered what seemed to have been the death-place of a white man. Some of the bones of the feet and hands were still there, and some partially decayed remnants of a pair of soldier's drawers. It was the death-bed, probably, of one of Sergeant Casteel's party—four in all—of Lieutenant Waymire's detachment, 1st Oregon Cavalry, killed while scouting, in April last, by the Indians of Stein's valley and vicinity.

It had been our intention up to the time we reached the Pueblo country, to continue from thence in a direction considerably south of east, to the upper portion of the Owyhee river. This would have extended our route through another region of country of which very little is yet known. But our march to this point, however slow, had severe upon our animals, and the greater portion of them required rest and good grazing before they would be able to com-

mence our return journey. Picketing our animals in the daytime, and tying them close at night, rendered necessary to prevent raids and stampedes by the Indians, had worn heavily upon them, and it had become a question whether all could be got back to the post again. Our supplies, too, having become too short for our return trip, in consequence of the escort duty we had performed and had not anticipated before leaving Fort Klamath, and it was necessary to replenish them either from Camp Alvord or Fort Boise. Rumors of Indian difficulties ahead, too, rendered it apparently unsafe for the trains we had brought in safety to this point to continue their journey unguarded. Under all these circumstances, we determined to change our course to the northward, and intercept the route explored westward across the Owyhee by Captain Carry, 1st Oregon Cavalry, and used in the transportation of supplies from Fort Boise to his command.

We arrived at Camp Alvord on the 26th of August, and encamped on a small mountain stream, about two miles beyond where we found all the wild grasses abundant, and of excellent quality, mixed profusely in many places with clover and small rushes.

Stein's valley is another of those immense troughs, or basins, possessing the same general character that obtains in Warner's and Surprise valleys—emphatically alkaline, but dotted with a few fertile spots, covered with luxuriant grass, clover, rushes and wild pea-vine. Its general direction is north and south, and at the point where we encamped it is about ten miles wide; having along its eastern margin a dry lake with its bottom entirely without vegetation, and in many places so hard as to leave no impression of our horses' feet.

after passing over it. Beyond this, volcanic tables forms its eastern boundary, extending back eastward to and across the Owyhee river. Stein's mountain bounds it on the west, and supplies it, at the point where we were, with streams of pure water putting down from the snow banks deposited in the chasms and depressions of its summit. Springs are plentiful along its western border, forming in many places little rivulets; but neither they or the other streams extend more than a few hundred yards from the mountain's base before they sink. During our stay there, these streams fell back to the mountain by day, and came running down into the valley at night, much like the custom of the Indians, and similar in this respect to the small streams in some of the valleys of California.

This valley is noted among Oregon troops as the battle ground of Lieutenant Waymire, 1st Oregon Cavalry, in an affair with the Indians, in April last, in which that young officer displayed a courageous presence of mind, and a military tact, under very adverse circumstances, that would have done honor to a veteran, and which, doubtless, saved the detachment under his command, and a presumptive organization of citizens, understood to have been co-operating with him, from a total rout and great loss.

Some of the trains lagging from the last day's march in Pueblo valley—twenty-eight miles, over heavy sand and sage, without water, and the day very warm—it was necessary to remain here until all could be brought up and got in readiness for another hard drive of thirty three miles, over the same character of country, to the head of Crooked Creek, a tributary of the Owyhee.

Late in the afternoon of the 30th of August, the trains were sent in advance about twelve miles, in order that they might profit by the coolness of the evening and early morning, and reach water on the following day by the time at which they usually become the most thirsty. The poorer portion of one of the large trains remained here, however, to recruit its strength until the quartermaster's train of Capt. Curry's command should return to Fort Boise, when it would continue on under the protection of its escort.

Our full force not being deemed imperatively necessary to guard the trains hence to the Owyhee mines, and many of our animals absolutely requiring rest before setting out on our return journey, a detachment of nineteen enlisted men was detailed to compose the escort; selecting such animals for its use as were in the best condition. The rest of our animals, including our teams, and all of our supplies, except eight days rations for those who were to continue on, were put in charge of Sergeant James Moore, with a detachment also of nineteen men, to be guarded and cared for until our return.

Acting Assistant Surgeon Greer was directed to remain here also, as our lady invalid was yet unable to continue her journey without the benefit of the ambulance, the team to which was not in sufficient good condition to render it prudent to take it farther, in view of the service it yet had to perform on our homeward trip.

Several of Captain Curry's command were also very sick, including Acting Assistant Surgeon Cochrane—disease acute dysentery—rendering it necessary for Dr. Greer to perform the medical service for that command for the time being, in addi-

tion to that of our own, and to share with it the medical supplies which the necessities of the case required. Some of these it was necessary to replace from Fort Boise.

Passing across this valley in an easterly direction, and up through a wide and commodious cañon in its eastern rim to the general summit of the country beyond, we continued eastward along the old route over a continuous sand and sage plain, with a few spots covered with fragments of lava, and two small, dry, hard bottomed, basins, to the large cluster of springs that are the source of Crooked creek.

These springs, perhaps thirty in number, are all of them seemingly pure but differing somewhat in their temperature. Many of them are deep round holes shaped like a barrel set in the ground with its upper head taken out, the water boiling up with considerable force through their bottoms. All but the largest are thoroughly shaded by manges of the wild parsley.

Between and around these springs there is perhaps two square miles of very good land, covered with a fair growth of grass. The usual sage and a little greasewood is all there is for fuel.

In a grave-shaped crevice on the summit of a perpendicular wall of rock that bounded our camp on the southeast were the remains of a white man who had been dead probably about six months. He was evidently placed there by comrades, as portions of his clothing and his powder horn were in the crevice, and at the foot of the wall were the marks of an old camp that gave the appearance of having been sometime occupied.

At daybreak on the morning of September 1st we were visited by a considerable

shower, with wind, thunder and lightning, accompaniments, too sublime for description, but giving some of its witnesses a rather ridiculous appearance.

Crooked creek has a direction considerably north of east, and pursues its way as its name indicates under great difficulties through deep volcanic chasms that widen occasionally sufficient to allow a little inferior grass to grow along the waters edge at the bottom, and finally empties into the Owyhee a few miles below the crossing. The country through which it passes is covered almost entirely with lava, sand and sage, but the route is sufficiently smooth to admit of the passage of wagons with little difficulty. The road forms a junction with one of the routes from Humboldt, about six miles west of the Owyhee.

The descent to the Owyhee from the west is gradual and smooth, the route passing among detached perpendicular portions of what was once a high volcanic table, representing now, by a little stretch of the imagination, so many towers, and grand old castles, delineating the various orders of architecture, and on the whole presenting a sublime and picturesque appearance.

The crossing of the Owyhee is by a gravelly ford, smooth, and in the summer season, with but a little depth of water. The river here is about sixty yards wide, and when we crossed it, on the 2d, and again on the 20th of September, the greatest depth of water on the ford was not to exceed fourteen inches. It is somewhat alkaline, similar in this respect to Snake river, and has about the same temperature. Two small scow-shaped boats lying near, and a brush covered excavation in the river's eastern bank, were the only white men's marks of occupation that were visible, but

there were traditional rumors that sundry gallons of whisky were *cached* somewhere in the vicinity. It is probable that ferrage and refreshments, in a small way, are offered here during the winter season.

The ascent from the river to the summit of its eastern bank is quite steep, but might be made easy with some labor and a change of location to a ravine. Thence to the lower extremity of Jordon Creek valley, a distance of four miles, the route is again over lava and sand, and through sage and some greasewood.

Jordon Creek valley is about thirty miles in length, has a general direction from east to west, and varies in width from two to four or five miles. It is surrounded by a lava plain, covered with the usual sage, except at its eastern extremity where it is bounded by high grass-covered hills which separate it from the higher hills and mountains in which are situated the celebrated Owyhee mines. It seems very well adapted to grazing, and some portions of it to cultivation. In the eastern portion, nearest to the mines, quite a number of land claims are already taken and rudely improved, and this season fully one hundred tons of hay was cut upon them for the Booneville, Ruby City, and Silver City markets.

Jordon Creek, through nearly the whole length of the valley, was in pools, and of course its waters are correspondingly poor. Some of these pools are deep and four or five miles long, and are somewhat abundant with fish. The line of the creek is heavily fringed with large willows, and the mountains in which it takes its rise is quite well timbered with fir, some pine, and a little of the cottonwood. The route from the point where we entered the valley passes eastward along the north bank of the creek

for a distance of about twenty miles, when it bears more to the northward, passing over some long ranges of hills, and across a small stream of good water called Sucker creek, and forms a junction with the toll road from Booneville to Boise about twelve miles north of the former place.

For personal safety against the Indians, the few settlers there are in Jordon creek valley, meet and remain together at night, leaving their possessions unguarded, and with no assurance—only a hope—that they will be found undisturbed in the morning.

In the Spring, before our arrival in that vicinity, a citizens affair with the Indians of that neighborhood had occurred, in which several citizens, including Mr. Jordon, the discoverer of the Owyhee placer mines, and for whom Jordon creek was named, were killed. Colonel Maury, with a small detachment from Ft. Boise, hastened to the point of difficulty, but as the natural result of the citizens having taken the chastisement of the Indians into their own hands, they had retreated, nearly unharmed, to their mountain fastnesses and beyond the reach of any immediate punishment before Colonel Maury could arrive. This state of affairs kept the settlers of Jordan creek valley and in the mines also, in a continual alarm, and the rumors of Indian "sign" in the vicinity were frequent, and a fruitful source of urgent appeals for the presence of a military force.

The main rendezvous for the Indians of this region, appears to be in and around a considerable mountain, situated about forty miles southward from the upper portion of Jordan Creek Valley. A company of cavalry stationed in its immediate vicinity, where it could also guard the main

route from Humboldt, would undoubtedly rid the entire region of the Owyhee mines of the Indians that now infest it, retarding its mineral development, and endangering travel on its highways in all directions.

Placer mining in the vicinity of the Owyhee is, as yet, confined to a very small area, not extending outside of the neighborhood of Little Jordan Creek. It is no uncommon thing, however, for some portions of these mines to pay as high as fifty dollars per day, to the hand, though the average pay is of course much less. The dust is of an inferior quality, being alloyed more or less with silver. The best of it yields but a fraction over fifteen dollars an ounce, at the mint, and the poorest a fraction over eleven dollars. That which yields the least is taken from the vicinity of the Oro Fino mountain, in which there are numerous silver lodes, quite a number of which are being worked.

Quartz mining here is now in its infancy, but the indications are that it will be the business of this entire region by another year, and that it can be prosecuted with much more than ordinary success. The veins are gold and silver bearing, and, though small, are exceedingly well defined, and their location such as will permit them to be worked much more cheaply than this class of mines generally are. Four or five mills were nearly ready to begin work in the latter part of September, and the building of others contemplated. It is hardly probable however, that those first in operation will save anything like the full amount of silver, until they obtain the requisite machinery for reducing the sulphurates in which form it mainly exists. The mountains in which these mines—quartz and placer—are situated, are on the

head waters of Jordan creek, and are mainly granite. They are sparsely covered with fir, and some pine, that answers for the practical use for which it is required, but the quality is not good. The first lumber mill of that region went into operation in September, and the price of lumber fell at once from three hundred dollars per thousand feet to just half that sum.

Booneville, Ruby City, and Silver City, are the marts of commerce for that region. These are situated on Little Jordan Creek, and are only about a mile and a half apart. Booneville and Ruby City are connected by a toll-road. Ruby City is the county seat of the county of Owyhee, I. T., and has a post office and tri-weekly mail service through Booneville to and from Boise. It has pony express facilities also from Sacramento, California, by way of Virginia City, and Humboldt, Nevada, by which, in the summer season, it is furnished with California news only six days old.

At these points the parties who had traveled under our escort, and had produce to dispose of, sold their flour at eighteen to twenty-two and a half cents per pound, in coin; bacon at forty cents, and butter at 75 cents, coin.

The cattle trains, after recruiting their strength a few days here, continued their journey to Boise and Idaho City.

The country in and around the Owyhee mines, affords excellent grazing, mainly the nutritious bunch grass, and sufficient good cold water for such purposes also.

It not being necessary for the detachment to proceed farther as an escort to the trains, it was encamped seven miles west of Booneville, where was offered safe and excellent facilities for recruiting the strength of our horses. Taking with me

Sergeant Crockett, and Corporal Riddle, six employees, and the requisite number of pack mules, I continued on to Fort Boise for the supplies requisite for our return trip.

The special express, with orders from headquarters, District of California, directing our immediate return to Fort Klamath, reached us on the 3d of September near the head of Jordan creek valley; but before we could enter upon the execution of these orders it was necessary to procure medicines, and other supplies, not to be obtained from Captain Curry, from Fort Boise. The time to be occupied however, for this purpose, would not be lost, as it would be fully required to put some of our horses and mules in the proper condition to return to Fort Klamath.

Our route hence was from Booneville nearly due north, over the Boise and Booneville wagon road, down Runuel's creek for a distance of fifteen miles thence, leaving that stream on our left, continuing the same northerly course for another fifteen miles, all the way a desert, to Snake River. The country for the first fifteen miles out of Booneville, resembles in its features that which is nearer and immediately surrounding the Owyhee mines; affording good grazing and good water, and some timber. Several farms are under improvement along Runuel's creek, and though it was now the 8th of September, and the nights uncomfortably cold, we saw no indications of any serious damage having been done to the gardens by frost.

Crossing Snake river at the uppermost ferry,—Frnit & Co's,—we continued along the wagon road just named, for a distance of thirty miles, all the way over a desert, to Fort Boise; arriving there

September 9th.

At Fort Boise we met Mr. Tower, of the "Tower House," in Shasta county, California, who had reached Boise by way of the Red Bluff and Malheur route, mentioned in this part of the report which refers to the region of Goose Lake, and from him we learned that he and his party were attacked by the Indians on a ninety-mile desert, situated some distance north of Goose Lake Valley. Tower & Co's loss in this affair, were Mr. Dean, one of the firm, and an employee killed, and three hundred cattle. This information accounted for the presence of so much cattle "sign" in Warner's valley and vicinity, and strengthened our convictions as to the force on Warner's mountain, as well as our conjectures as to the reason of its being there.

HOMeward JOURNEY.

Obtaining at Fort Boise such supplies as we required for our homeward march, we left that post on the 15th of September returning to our camp on Little Jordon creek by the same daily marches, and over the same route we had traveled in going from it, arriving there on the 19th; thence back in the same manner to our camp in Stein's valley, arriving there on the 22d of September.

On the morning of the 24th of September, the entire command began its homeward journey, passing southward out of Stein's valley into that of Pueblo, thence in a southwesterly course over the Pueblo mountains to the eastern limits of the great desert plain that lies between Stein's and Warner's mountains; the western limits of which we had traversed to the southward on our outward trip.

The object of finding a pass at this point, over the Pueblo mountain's was to reach

the great plain just mentioned, without going southward around the mountain eastern and southern base, and entering the same plain at the point where we left it in going out. Our attempt to cross was made with some misgivings as to its practicability, and at variance with the opinions of those with whom we conversed upon the subject, except those of Lieut. Bowen, serving with Capt. Carr. The advantage gained, if our efforts should be successful, would be well worth the risk incurred to obtain it, as the distance to Warner's valley would be much less than by our old route, and the adaptation of the country to travel, beyond the Pueblo mountain, and the means of subsisting our animals there, could hardly be any worse. The effort however, was eminently successful. The distance across the mountain being about fifteen miles, and the route, though somewhat rough and steep in a few places, is a very good one, and with a little labor can be made better. The mounds here are covered with good bunch-grass, and afford good water at convenient distances. At the time of our crossing, the day was clear, and from the summit, Warner's mountain was in plain view directly to the westward, and jutting past its southern extremity could be seen the dark outlines of one of the Sierras peaks, situated north of the old emigrant pass, at Surprise Valley.

The desert plain upon which we entered after effecting this crossing, extends along the western base of Stein's mountain, and its continuations northward, as far as the eye can see; westward to and along Warner's mountain and valley, while the Pueblo mountain circles round its southern extremity, opening at the point where we entered Pueblo valley, on our outward

march.

Along the base of Stein's mountain, sloping down to the level of the plain, is a strip of good land; varying in width from one to four or five miles, and covered with a luxuriant growth of the various wild grasses, including a few patches of clover, and well watered by streams flowing down from the mountain. Some of these streams are beautifully fringed with large willows, and near the gorges through which they make their descent from the mountain are a few trees of cottonwood. The juniper introduces itself again on the west side of the mountain, where it is unusually large and abundant.

From a point about ten miles north of the place where we entered this plain, our course was nearly due west, with Warner's mountain directly before us. The first day's march from this point, however, we explored under great difficulties. The south winds prevailed for several successive days, bringing with them such a mass of smoke as almost to obscure the sun; hiding everything in the way of landmarks, rendering explorations in advance extremely difficult, and a movement of the entire command upon an unknown desert, without this precaution, imprudent, and hazardous. We were also in the vicinity of another horde of Indians, the same with whom Lieut. Waymire had the affair in Stein's valley, sometime during the previous April, making it unsafe for any small detachment to move in advance farther than it could go and return on the same day. The weather continuing smoky however, we moved all together; but after a few hours the smoke became unusually dense, we were compelled to return to the camp we had left. The following night, twenty-five

of the animals of our train escaped from the guard, and were captured by the Indians; but were followed so closely that all but five of them were recovered. The next morning, September 29th, as strong a detachment as could be spared from camp was sent towards Warner's mountain, with instructions to build signal fires where the first water and grass should be found, and then to fall back to the command, which would move up as soon as the signals should be seen. At daybreak on the morning of the 30th a bare glimmer of light pierced its way through the smoke from the westward, and the command again took up its line of march in that direction. A march of twenty-seven and a half miles, over a tolerable smooth and hard surface, with about ten miles of the distance covered with huge sage, brought us to a considerable butte, on the north and west side of which had been found several good springs and plenty of grass. The next day's march, nineteen and a half miles, in the same direction, but a part of the way across a field of sharp fragments of lava, uncomfortable for our teams to pass over, brought us to our old route on the south-east side of Warner's Mountain. By referring to our odometer records, we found that the distance saved by crossing Pueblo Mountain, was sixty-seven miles, or a total of seventy-three and a half miles by this route, against one hundred and forty and a half miles by the old one.

From this point we continued into Warner's Valley by our outward route, there leaving it again, and continuing directly across the valley, passing thence a few miles northward down its western limits, thence ascending its western rim, by a fair grade, and continuing westward over

a lava table, with occasional smooth depressions in its surface, to the foot-hills of the Sierras. Thence by a gradual ascent along glades, and over a few points putting down from these mountains; and thence by a smooth and easy descent into Goose Lake Valley.

The distance from Warner's to Goose Lake Valley, by this route, is but a little over forty miles, with good grass and water, at convenient distances, along the route.

The pass across the Sierras here, is by a wide gap about a half mile wide at its narrowest point, from whence it widens abruptly on either side; timber, grass, and water is abundant all the way through, and the route is entirely free of rock.

Our general course from the Owyhee Mines to this point, was nearly due west, and the character of the country passed over, entirely volcanic.

The general direction of the volcanic tables and mountains crossed, is north and south, rendering the exploration of the route much more difficult and fatiguing than if it had been parallel to them.

The elevations and depressions of the route are not very numerous, nor are they very abrupt. Especial care was taken to find the best passes over the mountains and tables, and across the intervening basins and valleys. Our success in this particular is mainly due to the fact that from the head of Crooked Creek, our route was along the summit of two vast water sheds, one descending northward towards the Columbia river, and the other southward towards the Sacramento.

Crossing Goose Lake Valley nearly due west, and about twelve miles from the head of the lake, we formed another junction

with our outward route, and found that we had made another saving in distance of forty two miles, with a much better route than the old one in every particular.

At this junction we had the satisfaction to find that the overland immigration to Southern Oregon by way of the Humboldt, had taken our outward route at the Emigrant Pass over the Sierras, and passed into Jacksonville *via* Fort Klamath.

From Goose Lake Valley, we continued along our old route to Fort Klamath, where we arrived on the 18th of October.

The time occupied in making the trip from Boise to Fort Klamath, was thirty-four days. The number of days on which we traveled was twenty-three, which is about the time required to pass either way over the route, now that it is explored and marked.

Some of the public benefits which have already accrued by reason of this reconnoissance are: The exploration of the country between Fort Klamath and the Owyhee region, of which comparatively nothing has heretofore been known.

It contributed materially towards the continuance of peaceful relations towards citizens, on the part of Indians whom the hostile chief Panlini had invited to join him, and whose co-operation he confidently expected, and who abandoned his usual haunts when he found he could not obtain it.

The discovery of many of the haunts, strongholds, and hiding places of the most dangerous portions of the Snake and Piute Indians, that will be useful to the public, and beneficial to the service in future operations.

The safe conduct of a considerable body of citizens, some of whom had been attacked by the Indians and forced to seek its protection, to a secure destination, through a hostile Indian country, and preventing the barbarous destruction of life, and the loss of a large amount of property that must have occurred, had it not been ordered, or other service similar to it.

The opening of a route from Northern California, Southern and Middle Oregon, to the Owyhee and Boise regions, that is fully two hundred miles shorter, and affording better natural requisites for travel, such as good grass and water, and at more convenient distances, than any other route yet explored, or that it seems possible can be found.

It has opened a line for direct communication between Fort Klamath, Fort Boise and Fort Hall, and shortened the old Southern Oregon Emigrant Road several hundred miles.

It is due to the men who accompanied me, both civil and enlisted, that I should acknowledge my indebtedness to them, in a great degree, for the success of the reconnaissance. Sergeant James Moore, commanding the detachment after the 6th of July, acquitted himself throughout in a manner truly commendable, and worthy of a higher rank. Sergeant Garrett Crockett, acting, while his health permitted, in the line of a staff officer, and Sergeant A. M. Beaty, who succeeded him in that capacity, were also correct and zealous in the performance of their duties, though many to which they were assigned were special, and dangerous to execute. Both deserve

special commendation also, and fully merit promotion. Sergeant Geisy always performed his duty cheerfully and soldier-like, and proved a most faithful non-commis- sioned officer. The same remark applies to Corporals W. R. Marquiss, James W. Marquiss, William Dunlap, H. C. Slocumb, and Abner Riddle; and to private Volney Colvig, Acting Commissary Sergeant. Corporal W. R. Marquiss had special charge of the 12-pounder Mountain Howitzer, and acquitted himself in a most satisfactory manner in the discharge of that duty also. The uniform cheerfulness and alacrity with which the men, and all who were in any way connected with the command, performed their duties, added greatly to the pleasure and interest of the trip. The several trains also, who travelled under our escort, conformed cheerfully to all regulations imposed on their account both as to the order of travel, and their disposition at camp—an exception to the general rule in all such cases.

In the conclusion of this report, I would most respectfully suggest that a permanent post established in Goose Lake Valley, near its northern extremity, where there are all the natural requisites for its main- tainance on an economical scale, would be of vast benefit to the frontier settlements, extending from Red Bluff, California, to Eugene City, in Middle Oregon, a distance of three hundred and eighty-two miles, and including in the range, Shasta City, Weaverville, Yreka, Jacksonville and Roseburg, and would doubtless hasten the period when military protection any where along this frontier can be happily dispensed with.

As has already been stated in this re-

port, the upper portion of Goose Lake Valley is neutral ground, as between the Snake, Pinto, Upper Pitt River, Modoc, and Klamath Indians; but the country infested by each of these tribes respectively, borders directly upon it, and taken as a whole, form its entire boundary. Its surrounding, are such as will admit of the rapid movement of troops in any direction that might be required. A post once es- tablished there, the main thoroughfares northward from the two principal points in California—Red Bluff and Yreka—and others respectively from Jacksonville, in Southern Oregon, and Eugene City, in Middle Oregon, Reading's route from old Fort Boise, the new route from Fort Boise, and the Owyhee, and the old Southern Oregon Emigrant route, would converge to, and radiate directly from it, and would thus render any portion of the surround- ing country readily accessible to troops, and to the public.

The distance from, and to, principal points, would be as follows: From Fort Klamath, one hundred and ten miles; from Jacksonville via' Fort Klamath, two hundred miles.

From Yreka, portion of route to be opened, two hundred and thirty miles.

From Fort Crook, one hundred and twenty miles, or upwards.

From Red Bluff, route can be explored, probably not to exceed two hundred and fifty miles.

From Eugene City, route to be explor- ed, probably about two hundred and six- ty miles.

Route thence to Surprise Valley, forty- four miles.

To Pueblo mines, by wagon road, one hundred and twenty nine miles.

To Owyhee mines, new route, two hundred and seventy miles.

To Fort Boise, same route, three hundred and thirty miles.

Troops can be maintained at this point much cheaper than at Fort Boise or anywhere in that region; and operations in the Indian country northward of it to Malheur springs, and around to the eastward to Harney Lake, and the Owyhee region, and of course at all the other points in its vicinity, can be more effectively conducted with this point as their base, and at much less expense, than from Fort Dalles, Walla Walla or Boise. At this point the movement of troops, in any direction, would be in a hostile Indian country, and consequently no time would be lost in moving either way through any portion of it. The saving in expense would be mainly on the score of transportation. Flour and bacon could be drawn from Rogue River valley, whence they are now procured for Fort Klamath, and such supplies as it would be necessary to procure from Department Headquarters, would be shipped up the Sacramento river to Red Bluff and from thence would have but about two hundred and fifty miles of land carriage to their destination. That a great saving would thus be made over shipments

from San Francisco to Portland, thence to Fort Vancouver, thence up the Columbia to Forts Dalles and Walla Walla, and finally across the country far to the northward and eastward of the points where a large portion of them are required to be used, can be very readily observed.

There is no point between the Sierra Nevada Mountains and the Owyhee Mines, along the route we explored, that affords timber, either for building, or for fuel.

Some point near Harney Lake would be the next best location, so far as the natural requisites for a post are concerned; but the necessity for a post there is not so great as at the point suggested.

The route just explored will be adopted early next Spring by the travel from Northern California and Southern Oregon, to and from the Owyhee and Boise regions, and at best, troops at Goose Lake, Warner's Valley, Stein's Valley, and near Jordan Creek Valley, will be required during the whole of next Summer. From these points the route can be effectually guarded and a wide range of country traversed in every direction, the Indians prevented from gathering their usual supplies for the next winter, and thus driven to more remote regions, or forced to a surrender.

Distance from Fort Klamath to Fort Boise.

DATE	STAIONS.	Total distance from Fort Klamath.	Intermediate dis- tances.	REMARKS.
1864.				
June 28,	Williamson's River,	9		
" 29,	Sprague's River,	17	26	Rec'd news of Indian attack on Richardson & others, Silver L.
July 3.	Sprague's River Valley,	11	37	
" 4.	Moore's Creek,	8	45	
" 8.	Sprague's River, south fork,	12	57	Capt. Kelly returned to Fort Klamath, Richardson & other trains joined.
" 10.	E. branch of Sprague's R.	10	67	Round grove of pines.
" 13.	Goose Lake Moutatus,	6	73	Small N. & S. summit glade.
" 14.	Drew's Valley,	8	81	
" 15.	" "	4	85	
" 16.	Goose Lake Valley,	11	96	
" 17.	Goose Lake Valley 2d,	11	107	East side, near head of L., Burton killed on the following day.
" 20.	Goose Lake Valley 3d,	18	125	Other heavy trains joined.
" 21.	Fandango Valley,	9	134	
" 22.	Surprise Valley,	6	140	W. side, N. of old S. O. E. road.
" 26.	Cow Head Lake,	12	152	Sent last express to Ft. Klamath
" 29.	Cow Head Lake 2d,	3	155	Good spring water, good grass.
" 31.	Willow Springs.	8	163	Fair " " "
Aug. 1.	Warner's Valley.	20	183	E. side near southern extremity.
" 3.	Warner's Valley 2d,	9	192	Springs on east side of small lake
" 5.	Warner's Valley 3d,	17	209	Clover Camp.
" 6.	" "	24	233	Out 12 miles and return.
" 8.	Warner's Valley 4th,	13	246	S. extremity of Warner's Mt'n.
" 9.	Crockett's Spring,	12	258	S. base Warner's Mt, to eastward
" 10.	Lone Pines,	4	262	S. E. extremity, Warner's Mt'n.
" 13.	Guano Lake,	23	285	Bad water, poor grass.
" 14.	Isaac's Sprungs,	28	313	Good water and grass.
" 17.	Piute Camp,	24	337	Strong hold of Piute Indians
" 19.	Pueblo Valley,	22	359	Cañon of Pueblo Mountain.
" 20.	Pueblo,	5	364	City Site, no buildings.
" 21.	Trout Creek,	11	375	Good water and grass.
" 25.	Horse Creek,	28	403	Line betw'n Pueblo & Stein' Mts.
" 26.	Stein's Valley,	10	413	Camp Alvord.
" 31.	Head of Crooked Creek,	33	446	Large cluster of fine springs
Sept. 1.	Crooked Creek,	14	460	Cañon, grass scarce.
" 2.	Jordan Creek Valley,	17	477	Western extremity.
" 3.	Jordan Creek Valley 2d,	22	499	Good grass, water in pools.
" 4.	Little Jordan Creek,	20	519	Seven miles W. of Boonville,
" 7.	Runnel's Creek,	12	531	Five miles N. of Boonville
" 8.	Snake River,	25	556	Thirty miles N. of Boonville.
" 9.	Fort Boise.	30	586	Thirty miles N. of Snake River.

Distance from Boise to Fort Klamath.

			1864.
Sept.	14.	Snake River,	30
"	15.	Runnel's Creek,	25 55
"	16.	Little Jordan Creek,	12 67
"	18.	Jordan Creek Valley,	20 87
"	19.	Jordan Creek Valley, 2d.	22 109
"	20.	Crooked Creek,	17 126
"	21.	Head Crooked Creek,	14 140
"	22.	Camp Alvord,	33 173
"	24.	Head of Pueblo Valley,	12 185
"	25.	Pueblo Mountain,	11 196
"	26.	Stein's Mountain,	16 212
"	30.	Beatty's Springs,	27 239
Oct.	1.	Crockett's Spring,	19 258
"	2.	Warner's Valley,	16 274
"	4.	Warner's Valley, 2d	10 284
"	5.	Head of Honey Creek.	15 299
"	6.	Sierra Nevada Mountains.	15 314
"	8.	Sierra Nevada Mountains,	6 320
"	9.	Goose Lake Valley,	11 331
"	11.	Drew's Valley,	15 346
"	12.	Goose Lake Mountains,	12 358
"	13.	Sprague's River,	16 374
"	14.	Sprague's River 2d,	12 386
"	15.	Sprague's River 3d,	19 405
"	17.	Klamath Valley,	22 427
"	18.	Fort Klamath.	4 431

Western foot hills.
West base—Weather smoky.

Distance from Jacksonville to Fort Klamath via Butte Creeks and Mt McLaughlin.

Station.	Total distance from Jacksonville.	REMARKS.	
		Intermediate distances in miles.	
Stuarts Creek,	6		Rogue River Valley.
Little Butte Creek,	12 18		Bridge.
Obenchain's	7 25		Public House.
Big Butte Creek,	8 33		Bridge.
Rancheria Prairie,	9 42		Good grazing.
Twin Lakes,	6 48		Summit mountains—west side.
Four Mile Lake,	4 52		Summit mountains—east side.
Cold Spring,	3 55		Base of mountains—east side.
Point of Rocks,	4 59		West side of Big Klamath Lake.
Cherry Creek,	17 76		West side of Big Klamath Lake.
Fort Klamath.	12 88		Four and a half miles north Big Klamath Lake.

